diagnostic services such as blood pressure checks (27 percent among males and 38 percent among females) and clinical lab tests (19 percent for males and 23 percent for females). A general examination was made and/or a history taken in 22 percent of all visits by either male or female patients. Other specified diagnostic services included X-rays, EKGs, and Pap tests. In about one in 10 visits no diagnostic services were provided.

Drugs were the most commonly prescribed therapy (51 percent among males and 54 percent among females). Next in frequency was diet and/or counseling (26 percent among males and 28 percent among females). Other therapies prescribed by physicians included office surgery and immunization (which included vaccination or the administration of desensitizing agents or substances). There was no therapeutic service at all in about one in five visits.

The majority of all office visits to physicians lasted between six and 15 minutes (56 percent for both male and female patients). About one in four visits to the physician's office lasted longer than a quarter of an hour and approximately one in 20 visits extended beyond a half hour. (See chart on back cover.) In about 3 percent of the visits no direct contact was made with the physician; in these instances care was provided by a member of the physician's staff.

At the conclusion of the visits most patients were directed to return for a follow-up visit at some specified time; 58 percent of the males and 63 percent of the females were so advised. These figures are in close agreement with the findings relating to the proportion of patients who presented old problems. Nearly a quarter of the patients were requested to return if they thought it necessary. In about a tenth of all cases (13 percent among males and 10 percent among females), no arrangements were made for follow-up.

Mortality Among United States Service Personnel

During the 1976-80 period, the overall death rate among United States service personnel was about three fifths the death rate among males in the general population of the United States. However, military personnel experienced generally higher death rates than did insured males.

Mortality data relating to the United States armed forces have been developed from statistics supplied by the Department of Defense and from the experience under Servicemen's Group Life Insurance, Veterans Administration. The deaths and exposure figures for the military also cover female personnel who constituted about 8 percent of the armed forces in 1978 (the midpoint of the period under review). Because of the small proportion of women in service, comparisons have been made with males in the general population and insured males.

As shown in Table 1, the overall death rate among United States service personnel in 1976-80 was 1.22 per 1,000 for all branches of service combined, with the lowest rate (.97 per 1,000) occurring at ages 30-34. At ages under 35, death rates ranged from a low of .97 per 1,000 at ages 30-34 to a high of 1.29 at ages 20-24. At ages 35 and over, mortality rates increased steadily with advance in age, from 1.26 per 1,000 at ages 35-39 to 4.02 at ages 50 and over. The highest death rate by branch of service was recorded by Marine Corps personnel (1.57 per 1,000 for all ages com-

TABLE 1—MORTALITY AMONG UNITED STATES SERVICE PERSONNEL, 1976-80

Branch of Service	Death Rate per 1,000								
	Ages 17 and Over*	Ages 17-19	Ages 20-24	Ages 25-29	Ages 30-34	Ages 35-39	Ages 40-44	Ages 45-49	Ages 50 and Over
All Causes									
All branches	1.22	1.16	1.29	1.02	0.97	1.26	1.54	2.64	4.02
Army	1.20	1.17	1.31	1.01	.96	1.16	1.38	2.58	2.61
Navy	1.32	1.19	1.44	1.17	1.07	1.37	1.61	2.10	3.64
Air Force	1.02	.90	.90	.78	.84	1.25	1.69	3.01	5.88
Marine Corps	1.57	1.40	1.65	1.68	1.44	1.43	1.20	2.66	4.70
All enlisted personnel	1.20	1.16	1.31	0.98	0.89	1.23	1.60	2.70	3.85
Army	1.27	1.17	1.34	1.08	1.10	1.34	1.77	3.45	3.47
Navy	1.30	1.19	1.47	1.11	.94	1.29	1.66	2.66	4.75
Air Force	.87	.90	.90	.67	.62	1.08	1.48	2.04	2.39
Marine Corps	1.53	1.40	1.69	1.45	1.02	1.29	1.18	1.90	6.98
All officers	1.34	†	0.76	1.18	1.20	1.36	1.45	2.56	4.18
Army	.64	†	.71	.56	.49	.53	.62	1.39	1.98
Navy	1.51	†	.74	1.45	1.59	1.83	1.59	1.74	2.91
Air Force	1.71	†	.93	1.25	1.36	1.69	2.04	3.87	6.97
Marine Corps	2.01	†	.52	2.59	2.56	1.73	1.31	3.47	3.33
Accidents‡									
All branches§	0.93	1.13	1.13	0.85	0.66	0.64	0.45	0.42	0.68
Army	1.00	1.17	1.23	.85	.68	.63	.51	.59	.34
Navy	1.00	1.10	1.21	.95	.75	.75	.45	.29	1.36
Air Force	.67	.90	.80	.67	.52	.54	.40	.39	.80
Marine Corps	1.24	1.33	1.20	1.34	.93	1.01	.59	†	†

*Adjusted on basis of age distribution of United States service personnel, 1976-80.
†Fewer than 10 deaths.
‡Based on mortality experience in 1978-80.
§Includes Coast Guard, Public Health Service, and National Oceanic and Atmospheric Administration.

Source of basic data: Reports of United States Department of Defense and experience under Servicemen's Group Life Insurance, Veterans Administration.

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TABLE 2—RATIOS OF DEATH RATES AMONG UNITED STATES SERVICE PERSONNEL, 1976-80 TO DEATH RATES AMONG MALES IN THE GENERAL POPULATION, 1978

Branch of Service	Ages 17 and Over*	Ages 17-19	Ages 20-24	Ages 25-29	Ages 30-34	Ages 35-39	Ages 40-44	Ages 45-49	Ages 50 and Over
				All Causes					
All branches	0.57	0.80	0.63	0.53	0.50	0.50	0.40	0.43	0.38
Army	.57	.80	.65	.53	.50	.46	.36	.42	.25
Navy	.63	.82	.71	.61	.56	.54	.42	.35	.33
Air Force	.46	.62	.44	.41	.44	.49	.44	.50	.55
Marine Corps	.80	.96	.81	.87	.75	.56	.31	.44	.45
All enlisted personnel	0.59	0.80	0.64	0.51	0.47	0.48	0.42	0.44	0.37
Army	.63	.80	.66	.56	.57	.53	.46	.57	.35
Navy	.65	.82	.72	.58	.49	.51	.43	.44	.42
Air Force	.41	.62	.44	.35	.32	.43	.39	.34	.23
Marine Corps	.80	.96	.83	.75	.53	.51	.31	.31	†
All officers	0.50	†	0.37	0.62	0.63	0.54	0.38	0.42	0.39
Army	.24	†	.35	.29	.25	.21	.16	.23	.18
Navy	.56	†	.36	.75	.83	.72	.42	.29	.27
Air Force	.63	†	.46	.65	.71	.67	.53	.64	.65
Marine Corps	.80	†	.26	1.35	1.33	.68	.34	.57	.32
				Accidents‡					
All branches§	NA	1.24	1.08	1.06	1.08	1.00	0.83	0.88	1.10
Army	NA	1.28	1.12	1.04	1.04	1.00	.84	1.00	.51
Navy	NA	1.20	1.10	1.16	1.14	1.20	.75	.49	2.06
Air Force	NA	.98	.73	.82	.79	.86	.66	.66	1.21
Marine Corps	NA	1.45	1.09	1.64	1.42	1.61	.98	†	†

*Adjusted on basis of age distribution of United States service personnel, 1976-80.
†Fewer than 10 deaths.
‡Based on mortality experience in 1978-80.
§Includes Coast Guard, Public Health Service, and National Oceanic and Atmospheric Administration.
NA: Not available.

Source of basic data: Reports of United States Department of Defense and experience under Servicemen's Group Life Insurance, Veterans Administration.

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TABLE 3—RATIOS OF DEATH RATES AMONG UNITED STATES SERVICE PERSONNEL, 1976-80 TO DEATH RATES AMONG INSURED LIVES, 1978

Branch of Service	Ages 17-19	Ages 20-24	Ages 25-29	Ages 30-34	Ages 35-39	Ages 40-44	Ages 45-49	Ages 50 and Over
All branches	1.01	1.63	1.42	1.01	1.16	0.68	1.55	1.06
Army	1.02	1.68	1.40	1.00	1.06	.61	1.52	.69
Navy	1.03	1.82	1.63	1.11	1.26	.71	1.24	.96
Air Force	.78	1.14	1.08	.88	1.15	.74	1.77	1.55
Marine Corps	1.22	2.09	2.33	1.50	1.31	.53	1.56	1.24

Source of basic data: Death rates of United States servicemen represent the mortality experience, as reported by the Department of Defense. Death rates for United States male insured lives estimated by the Statistical Bureau of the Metropolitan Life Insurance Company, based on the mortality experience under Intercompany Standard Ordinary Nonmedical Issues (first five policy years).

bined) and the lowest by the Air Force (1.02 per 1,000). The death rates among Army and Navy personnel were 1.20 and 1.32, respectively.

The overall death rate among service personnel according to rank was 1.20 per 1,000 for enlisted personnel in all branches of service and 1.34 per 1,000 for officers. Army officers had the lowest death rate from all causes of death combined—.64 per 1,000—while Marine Corps officers had the highest rate—2.01 per 1,000. The mortality rate of .87 per 1,000 among Air Force enlisted personnel was significantly lower than the rates among enlisted men in all other branches and was about half the rate among Air Force officers.

The death rate from accidents was .93 per 1,000 for all branches of service combined. The rates ranged from a low of .67 deaths per 1,000 in the Air Force to a high of 1.24 per 1,000 in the Marine Corps. Both the Army and the Navy recorded a death rate from accidents of 1.00 per 1,000. Mortality from accidents was generally highest at ages under 30 but then declined steadily until age 50 when an upturn occurred. The experience among Marine Corps personnel was consistently higher than that for other branches of service.

The low death rates in the armed forces indicate that service personnel constitute a select group of healthy individuals. This favorable mortality experience reflects to a great extent the effects of medical screening and of the high standard of physical fitness maintained in military service. In addition, those who become seriously ill or develop chronic conditions are discharged from service for treatment and care by the Veterans Administration.

Table 2 presents the ratios of death rates among United States service personnel to the death rates among males in the general population. As indicated in the table, death rates from all causes combined were considerably lower for the armed forces than for males in the general population. The mortality among Army personnel was about three fifths that of males in the general population, while Air Force personnel enjoyed even more favorable mortality. At ages 25-39 the mortality from all causes among United States servicemen was about half that among men in the general population; the corresponding proportions were about four fifths at ages 17-19, three fifths at ages 20-24, and two fifths at ages over 40. However, the death rates from accidents among service personnel, with the exception of the Air Force, were generally somewhat higher than the rates for men in the general population.

In general, the mortality from all causes among

enlisted personnel paralleled that for all ranks by age group. The experience among officers varied to a somewhat greater extent. Only Marine Corps officers at ages 25-34 were subject to higher mortality than that among males in the general population.

Table 3 shows a comparison of the mortality experience among United States military personnel with that among insured males in the first five years after issue of their insurance. The ratios indicate that death rates from all causes were usually higher among service personnel than among insured lives. The widest differential occurred among those 20-24 years old, with the death rate for all branches of service about 1.6 times that of insured males. Mortality was 1.5 times that among insured lives at ages 45-49 and about 1.4 times at ages 25-29.

Fatal Accidents at the Preschool Ages

Accidents are the leading cause of death in the United States among children past infancy but not yet of school age. In 1979, the latest year for which official figures are available, more than 3,300 children aged 1-4 died as a result of accidental injuries—a death rate of 27.1 per 100,000 population. At these ages, accidents were responsible for nearly 3.5 times as many deaths as resulted from congenital anomalies, nearly six times the number of deaths from malignant neoplasms, and about 11 times the number of deaths from influenza and pneumonia.

In recent years there has been a sharp decline in mortality from nonaccidental causes among children at the preschool ages, reflecting to a great extent medical advances in the control of childhood diseases. As shown in the chart on page 13, between 1969 and 1979 deaths from causes other than accidents among children aged 1-4 decreased by about 25 percent among boys and 30 percent among girls. During the same period the mortality from accidents declined by only about 12 percent among boys and 16 percent among girls. As a result, deaths from accidents are of increasing importance in the total mortality picture among very young children. In 1969-70, accidents were responsible for 39 percent of all deaths among boys aged 1-4 and for 34 percent among girls at these ages; by 1978-79, the proportion of accidental deaths had risen to 43 percent among boys and 39 percent among girls.

The table on page 14 presents detailed data on the mortality from the predominant causes of fatal accidents among preschool children in 1978-79. The importance of accidents in the overall mortality among preschool children increased steadily with age. Among boys the proportion of accidental deaths rose from 33 percent of all deaths at age 1 to 54 percent at age 4; among girls the corresponding proportion rose from 33 percent to 45 percent. However, death rates from accidents decreased with age—declining from 35.0 per 100,000 at age 1 to 27.2 per 100,000 at age 4 among boys, and from 30.5 to 16.7 among girls at these ages. The mortality from all accidents was higher among boys than among girls; at ages 1-4 combined, the

sex ratio was 1.4 to 1. The greatest disparity occurred at ages 3 and 4.

Motor vehicle accidents are the most frequent cause of accidental death at ages 1-4. In 1978-79, such accidents accounted for more than a third of all accidental deaths among preschool boys and for two fifths of the deaths among preschool girls. The death rate among preschoolers as pedestrians increased with age, rising when children become more active, and were much higher among boys than among girls.

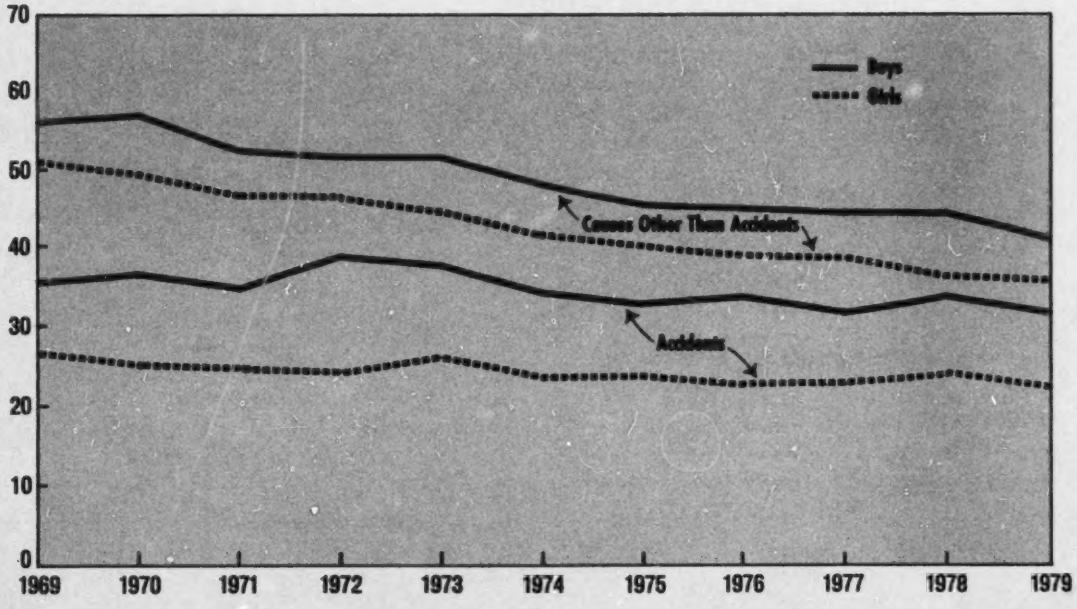
Drowning (other than in water transportation) ranked second among preschool boys and third among girls as a cause of accidental death. At every age preschool boys experienced substantially higher death rates from drowning than did girls, with the rate for boys about twice that for girls at age 2 and about three times that for girls at ages 3 and 4. Among both boys and girls the risk of accidental drowning was greatest at ages 1 and 2.

On the other hand, fires and flames ranked second as a cause of accidental death among girls and third among boys at the preschool ages. Nevertheless, the death rates from this cause were still much lower among girls than among boys except at age 1 when the rates were virtually the same. Among both boys and girls the risk of death from fires and flames was greatest at age 2.

Another significant cause of death among children aged 1-4 was the inhalation and ingestion of food or other objects causing obstruction or suffocation. About half of such fatalities were concentrated at age 1, as were deaths from poisoning by solids and liquids. The majority of deaths from poisoning at the preschool ages were due to drugs and medicaments.

Although the number of accidental deaths among preschool children has declined in recent years, accidents continue to be the major cause of death in this age group. Accidents are also responsible for many serious nonfatal injuries

Trend in Death Rates Among Children Aged 1-4, by Sex
United States, 1969-1979



Source of basic data: Reports of Division of Vital Statistics, National Center for Health Statistics.

MORTALITY FROM LEADING TYPES OF ACCIDENTS AT AGES 1-4

United States, 1978-79

Type of Accident	Age 1	Age 2	Age 3	Age 4	Ages 1-4
	Average Annual Death Rate per 100,000				
Boys					
Accidents—All Types	35.0	35.8	32.3	27.2	32.6
Motor vehicle	10.9	11.6	10.8	11.3	11.2
Pedestrian	3.1	5.2	5.4	5.9	4.9
Drowning*	7.7	8.4	7.4	5.1	7.1
Fires and flames	5.4	8.1	7.8	5.3	6.6
Inhalation and ingestion of food or other object	3.0	1.8	.9	.5	1.6
Falls	1.7	1.1	.8	.8	1.1
Poisoning by solids and liquids	1.3	.4	.3	.3	.6
Drugs and medicaments	.6	.1	.2	.1	.3
Girls					
Accidents—All Types	30.5	24.2	20.3	16.7	23.0
Motor vehicle	11.0	9.6	8.9	8.0	9.4
Pedestrian	3.0	3.0	3.8	3.4	3.3
Fires and flames	5.3	5.5	5.1	4.2	5.0
Drowning*	5.6	3.8	2.6	1.5	3.4
Inhalation and ingestion of food or other object	1.8	1.1	.7	.4	1.0
Falls	1.3	.8	.5	.2	.7
Poisoning by solids and liquids	1.2	.6	.4	.3	.6
Drugs and medicaments	.5	.4	.3	.2	.3
	Percent Distribution				
Accidental deaths as a percent of all deaths					
Boys	33%	45%	51%	54%	43%
Girls	33	41	45	45	39

*Exclusive of deaths in water transportation.

Source of basic data: Reports of the Division of Vital Statistics, National Center for Health Statistics.

among preschoolers. Data from the National Health Survey indicate that in 1981 about 7.3 million children under 6 years of age—more than a third of the population at these ages—suffered injuries requiring medical attention or involving at least one day of restricted activity.

Many deaths from motor vehicle accidents could be prevented and the severity of injuries reduced if young children were properly secured in safety seats (or safety belts for older preschoolers) while riding in cars. According to several surveys, fewer than 15 percent of the children riding in cars are properly restrained. The findings of a detailed 10-year study[1] conducted in the State of Washington indicate that about 90 percent of the deaths among children under 5 years of age could have been prevented and many of the nonfatal injuries would have been far less severe if existing safety devices had been used. A number of states have laws requiring the use of car safety devices for young children. As of December 1982, 20 states and the District of Columbia have enacted some form of child passenger restraint laws. In addition, car seats made on or after January 1, 1981 must now meet a strict federal safety standard. Parents should be warned that not all car seats on sale in stores, bought second hand, or for rental meet this standard. It would be wise to consult the shopping guide for child automobile restraints now available from the American Academy of Pediatrics.

[1]Scherz R: Fatal motor vehicle accidents of child passengers from birth to four years of age in Washington State. *Pediatrics* 68:572-575, Oct 1981.

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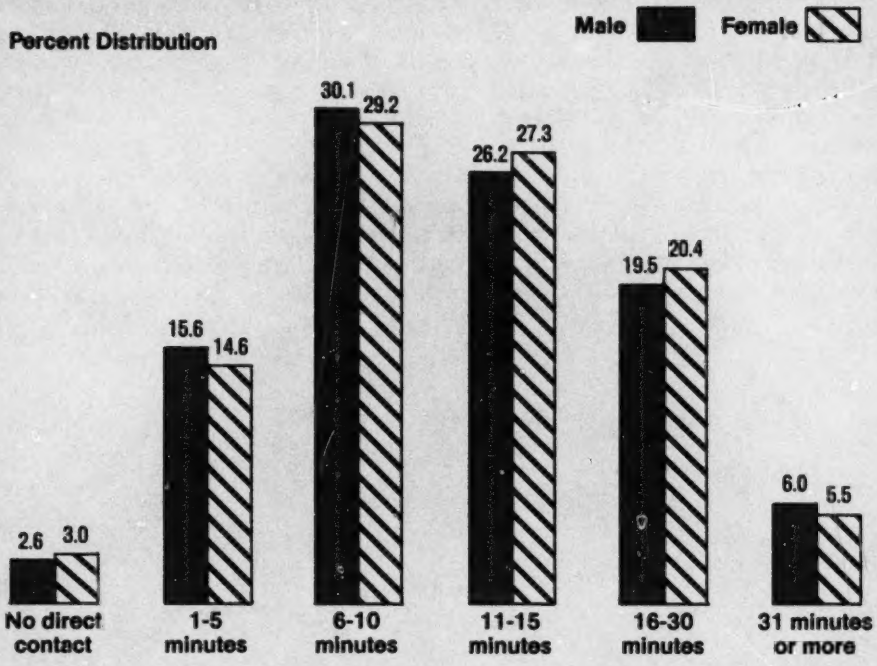
Duration of Office Visits to Physicians

United States, 1977-78



Source of basic data: National Ambulatory Medical Care Survey, National Center for Health Statistics.

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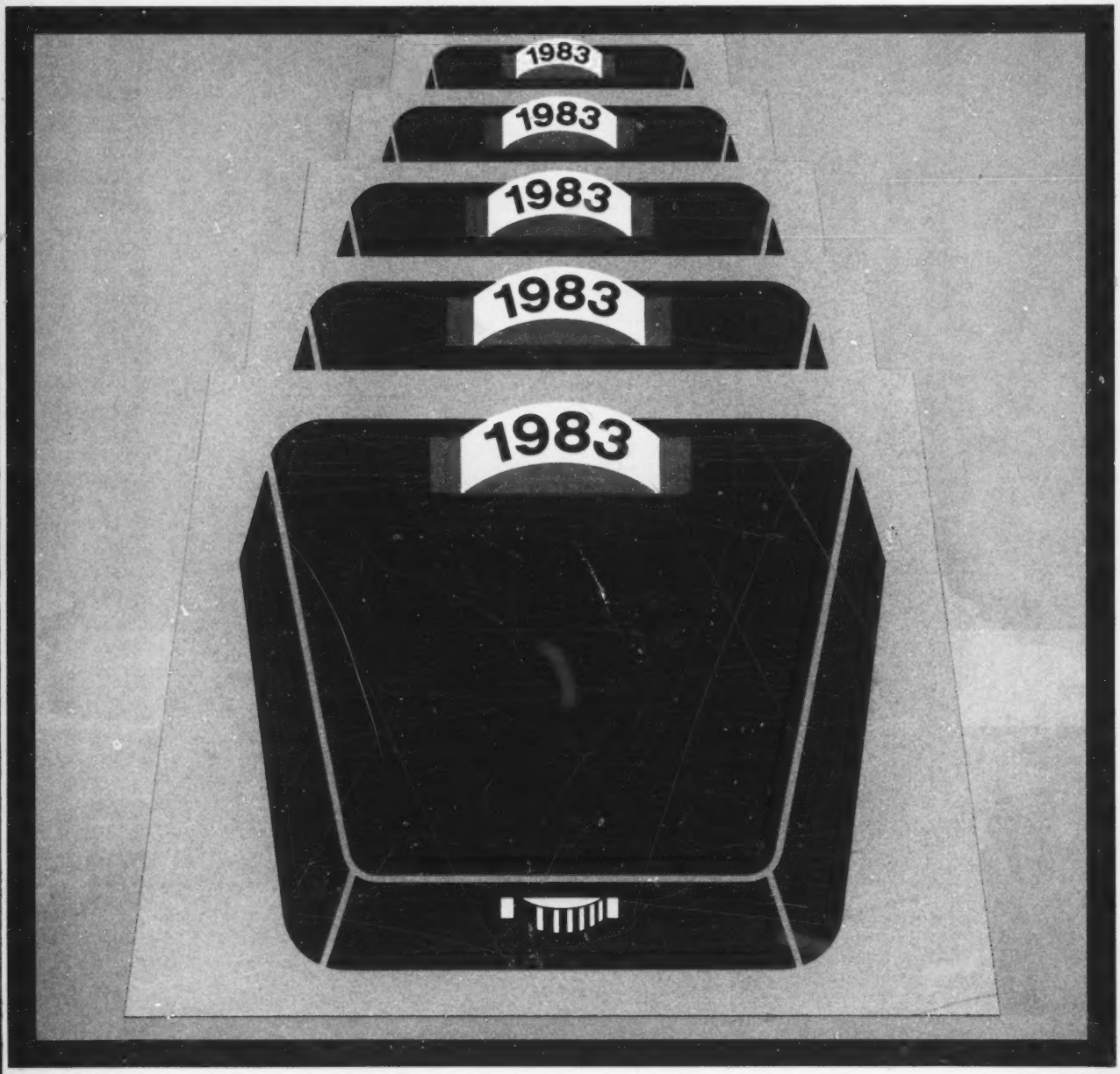

1983 Metropolitan Height and Weight Tables
Accident Death Toll in 1982
Life Expectancy in the United States
Disability Among Metropolitan Employees in 1980-81

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TABLE 1

1983 METROPOLITAN HEIGHT AND WEIGHT TABLES FOR MEN AND WOMEN

According to Frame, Ages 25-59

HEIGHT (In Shoes)†		Weight in Pounds (In Indoor Clothing)*		
		SMALL FRAME	MEDIUM FRAME	LARGE FRAME
Feet	Inches			
			MEN	
5	2	128-134	131-141	138-150
5	3	130-136	133-143	140-153
5	4	132-138	135-145	142-156
5	5	134-140	137-148	144-160
5	6	136-142	139-151	146-164
5	7	138-145	142-154	149-168
5	8	140-148	145-157	152-172
5	9	142-151	148-160	155-176
5	10	144-154	151-163	158-180
5	11	146-157	154-166	161-184
6	0	149-160	157-170	164-188
6	1	152-164	160-174	168-192
6	2	155-168	164-178	172-197
6	3	158-172	167-182	176-202
6	4	162-176	171-187	181-207
			WOMEN	
4	10	102-111	109-121	118-131
4	11	103-113	111-123	120-134
5	0	104-115	113-126	122-137
5	1	106-118	115-129	125-140
5	2	108-121	118-132	128-143
5	3	111-124	121-135	131-147
5	4	114-127	124-138	134-151
5	5	117-130	127-141	137-155
5	6	120-133	130-144	140-159
5	7	123-136	133-147	143-163
5	8	126-139	136-150	146-167
5	9	129-142	139-153	149-170
5	10	132-145	142-156	152-173
5	11	135-148	145-159	155-176
6	0	138-151	148-162	158-179

*Indoor clothing weighing 5 pounds for men and 3 pounds for women.

†Shoes with 1-inch heels.

Source of basic data: *Build Study, 1979*, Society of Actuaries and Association of Life Insurance Medical Directors of America, 1980.

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1983 Metropolitan Height and Weight Tables

The Metropolitan Life Insurance Company has been producing height and weight tables for many years and has just introduced an updated version. The 1983 Metropolitan Height and Weight Tables (shown on the opposite page) indicate the weights at which mortality is lowest—or longevity highest—and are intended to promote sound concepts of weight control.

Earlier weight tables, as well as the current tables, have been based on extensive mortality studies of insured lives conducted by the Society of Actuaries and the Association of Life Insurance Medical Directors of America. These two professional groups have collaborated on such studies periodically since the beginning of the century. Their latest study, the *Build Study, 1979*,[1] which was published in 1980, indicated that the gap between average weights and weights based on lowest mortality had narrowed considerably since the 1959 study.[2] This new trend has been taken into account in revising Metropolitan's height and weight tables for men and women. The new figures indicate that today's adults can weigh more than their 1959 counterparts and still anticipate favorable longevity. Although increased, the 1983 weights still fall below average weights. So the conclusion drawn from our earlier studies still applies—it is better to be lean than to be plump, and wiser to weigh less than the average rather than more.

The 1983 Metropolitan Height and Weight Tables on page 2 present weights based on the lowest mortality for men and women at ages 25 to 59 by height and body frame. The same information has been converted to the metric system in Table 2 on page 4. Since the weight tables are shown for small, medium, and large frames, instructions on how to determine body frame by elbow breadth are given in Table 3. Elbow breadth measurements were chosen for this purpose after extensive review of anthropometric studies. The frame designations were developed from elbow breadth measurements taken from the National Health and Nutrition Examination Survey, 1971-75,[3] and were so devised that 50 percent of the population falls within the medium frame and 25 percent each falls within the small and large frames.

Metropolitan's first weight tables *based on the lowest mortality* for men and women were published in 1942[4] and 1943.[5] The original tables, which became known as "ideal" weight tables, were intended to help people aim for a weight below the average for their height. Until then, only average weight tables had been available.

The data for the 1959 Metropolitan Desirable Weight Table[6] were derived from the pooled data of 26 insurance companies in the United States and Canada—about 4.9 million policies issued between 1935 and 1953, traced to policy anniversaries in 1954. Similarly, the 1983 Metropolitan Height and Weight Tables were based on the pooled data of 25 United States and Canadian insurance companies—about 4.2 million policies issued between 1950 and 1971, traced to anniversaries between 1954 and 1972. In both studies, people with major diseases (such as heart disease, cancer, or diabetes) were screened out to isolate the effect of weight on longevity. Between the two periods covered by these studies, however, there have been substantial advances in public health and nutrition, as well as changes in life style.

A comparison of Metropolitan's 1959 and 1983 height and weight tables appears in Table 4. Be-

TABLE 2
1983 METROPOLITAN HEIGHT AND WEIGHT TABLES FOR MEN AND WOMEN ON METRIC BASIS
According to Frame, Ages 25-59

MEN				WOMEN			
	Weight in Kilograms (In Indoor Clothing)*				Weight in Kilograms (In Indoor Clothing)*		
HEIGHT (In Shoes)†	SMALL FRAME	MEDIUM FRAME	LARGE FRAME	HEIGHT (In Shoes)†	SMALL FRAME	MEDIUM FRAME	LARGE FRAME
Centimeters				Centimeters			
158	58.3–61.0	59.6–64.2	62.8–68.3	148	46.4–50.6	49.6–55.1	53.7–59.8
159	58.6–61.3	59.9–64.5	63.1–68.8	149	46.6–51.0	50.0–55.5	54.1–60.3
160	59.0–61.7	60.3–64.9	63.5–69.4	150	46.7–51.3	50.3–55.9	54.4–60.9
161	59.3–62.0	60.6–65.2	63.8–69.9	151	46.9–51.7	50.7–56.4	54.8–61.4
162	59.7–62.4	61.0–65.6	64.2–70.5	152	47.1–52.1	51.1–57.0	55.2–61.9
163	60.0–62.7	61.3–66.0	64.5–71.1	153	47.4–52.5	51.5–57.5	55.6–62.4
164	60.4–63.1	61.7–66.5	64.9–71.8	154	47.8–53.0	51.9–58.0	56.2–63.0
165	60.8–63.5	62.1–67.0	65.3–72.5	155	48.1–53.6	52.2–58.6	56.8–63.6
166	61.1–63.8	62.4–67.6	65.6–73.2	156	48.5–54.1	52.7–59.1	57.3–64.1
167	61.5–64.2	62.8–68.2	66.0–74.0	157	48.8–54.6	53.2–59.6	57.8–64.6
168	61.8–64.6	63.2–68.7	66.4–74.7	158	49.3–55.2	53.8–60.2	58.4–65.3
169	62.2–65.2	63.8–69.3	67.0–75.4	159	49.8–55.7	54.3–60.7	58.9–66.0
170	62.5–65.7	64.3–69.8	67.5–76.1	160	50.3–56.2	54.9–61.2	59.4–66.7
171	62.9–66.2	64.8–70.3	68.0–76.8	161	50.8–56.7	55.4–61.7	59.9–67.4
172	63.2–66.7	65.4–70.8	68.5–77.5	162	51.4–57.3	55.9–62.3	60.5–68.1
173	63.6–67.3	65.9–71.4	69.1–78.2	163	51.9–57.8	56.4–62.8	61.0–68.8
174	63.9–67.8	66.4–71.9	69.6–78.9	164	52.5–58.4	57.0–63.4	61.5–69.5
175	64.3–68.3	66.9–72.4	70.1–79.6	165	53.0–58.9	57.5–63.9	62.0–70.2
176	64.7–68.9	67.5–73.0	70.7–80.3	166	53.6–59.5	58.1–64.5	62.6–70.9
177	65.0–69.5	68.1–73.5	71.3–81.0	167	54.1–60.0	58.7–65.0	63.2–71.7
178	65.4–70.0	68.6–74.0	71.8–81.8	168	54.6–60.5	59.2–65.5	63.7–72.4
179	65.7–70.5	69.2–74.6	72.3–82.5	169	55.2–61.1	59.7–66.1	64.3–73.1
180	66.1–71.0	69.7–75.1	72.8–83.3	170	55.7–61.6	60.2–66.6	64.8–73.8
181	66.6–71.6	70.2–75.8	73.4–84.0	171	56.2–62.1	60.7–67.1	65.3–74.5
182	67.1–72.1	70.7–76.5	73.9–84.7	172	56.8–62.6	61.3–67.6	65.8–75.2
183	67.7–72.7	71.3–77.2	74.5–85.4	173	57.3–63.2	61.8–68.2	66.4–75.9
184	68.2–73.4	71.8–77.9	75.2–86.1	174	57.8–63.7	62.3–68.7	66.9–76.4
185	68.7–74.1	72.4–78.6	75.9–86.8	175	58.3–64.2	62.8–69.2	67.4–76.9
186	69.2–74.8	73.0–79.3	76.6–87.6	176	58.9–64.8	63.4–69.8	68.0–77.5
187	69.8–75.5	73.7–80.0	77.3–88.5	177	59.5–65.4	64.0–70.4	68.5–78.1
188	70.3–76.2	74.4–80.7	78.0–89.4	178	60.0–65.9	64.5–70.9	69.0–78.6
189	70.9–76.9	74.9–81.5	78.7–90.3	179	60.5–66.4	65.1–71.4	69.6–79.1
190	71.4–77.6	75.4–82.2	79.4–91.2	180	61.0–66.9	65.6–71.9	70.1–79.6
191	72.1–78.4	76.1–83.0	80.3–92.1	181	61.6–67.5	66.1–72.5	70.7–80.2
192	72.8–79.1	76.8–83.9	81.2–93.0	182	62.1–68.0	66.6–73.0	71.2–80.7
193	73.5–79.8	77.6–84.8	82.1–93.9	183	62.6–68.5	67.1–73.5	71.7–81.2

*Indoor clothing weighing 2.3 kilograms for men and 1.4 kilograms for women.

†Shoes with 2.5 cm. heels.

Source of basic data: *Build Study, 1979*, Society of Actuaries and Association of Life Insurance Medical Directors of America.

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TABLE 3

HOW TO DETERMINE YOUR BODY FRAME BY ELBOW BREADTH

To make a simple approximation of your frame size:

Extend your arm and bend the forearm upwards at a 90-degree angle. Keep the fingers straight and turn the inside of your wrist toward the body. Place the thumb and index finger of your other hand on the two prominent bones on either side of your elbow. Measure the space between your fingers against a ruler or a tape measure. (For the most accurate measurement, have your physician measure your elbow breadth with calipers.) Compare this measurement with the measurements shown below.

These tables list the elbow measurements for men and women of medium frame at various heights. Measurements lower than those listed indicate that you have a small frame while higher measurements indicate a large frame.

MEN

HEIGHT (In 1-inch Heels)	ELBOW BREADTH (Inches)	HEIGHT (In 2.5-cm. Heels)	ELBOW BREADTH (Centimeters)
5'2" - 5'3"	2½" - 2⅞"	158 - 161	6.4 - 7.2
5'4" - 5'7"	2⅝" - 2⅞"	162 - 171	6.7 - 7.4
5'8" - 5'11"	2¾" - 3"	172 - 181	6.9 - 7.6
6'0" - 6'3"	2¾" - 3⅛"	182 - 191	7.1 - 7.8
6'4"	2⅞" - 3¼"	192 - 193	7.4 - 8.1

WOMEN

HEIGHT (In 1-inch Heels)	ELBOW BREADTH (Inches)	HEIGHT (In 2.5-cm. Heels)	ELBOW BREADTH (Centimeters)
4'10" - 4'11"	2¼" - 2½"	148 - 151	5.6 - 6.4
5'0" - 5'3"	2¼" - 2½"	152 - 161	5.8 - 6.5
5'4" - 5'7"	2⅜" - 2⅝"	162 - 171	5.9 - 6.6
5'8" - 5'11"	2⅜" - 2⅝"	172 - 181	6.1 - 6.8
6'0"	2½" - 2¾"	182 - 183	6.2 - 6.9

Source of basic data: Data tape, HANES I—Anthropometry, goniometry, skeletal age, bone density, and cortical thickness, ages 1-74. National Health and Nutrition Examination Survey, 1971-75, National Center for Health Statistics.

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TABLE 4

COMPARISON OF 1959 AND 1983 METROPOLITAN HEIGHT AND WEIGHT TABLES

MEN

Height (Without Shoes)		SMALL FRAME				MEDIUM FRAME				LARGE FRAME			
		1959	1983	Change Since 1959	Percent Change	1959	1983	Change Since 1959	Percent Change	1959	1983	Change Since 1959	Percent Change
Feet	Inches	Weight in Pounds (Without Clothing)											
5	1	105-113	123-129	18 16	17 14	111-122	126-136	15 14	14 11	119-134	133-145	14 11	12 8
5	2	108-116	125-131	17 15	16 13	114-126	128-138	14 12	12 10	122-137	135-148	13 11	11 8
5	3	111-119	127-133	16 14	14 12	117-129	130-140	13 11	11 9	125-141	137-151	12 10	10 7
5	4	114-122	129-135	15 13	13 11	120-132	132-143	12 11	10 8	128-145	139-155	11 10	9 7
5	5	117-126	131-137	14 11	12 9	123-136	134-146	11 10	9 7	131-149	141-159	10 10	8 7
5	6	121-130	133-140	12 10	10 8	127-140	137-149	10 9	8 6	135-154	144-163	9 9	7 6
5	7	125-134	135-143	10 9	8 7	131-145	140-152	9 7	7 5	140-159	147-167	7 8	5 5
5	8	129-138	137-146	8 8	6 6	135-149	143-155	8 6	6 4	144-163	150-171	6 8	4 5
5	9	133-143	139-149	6 6	5 4	139-153	146-158	7 5	5 3	148-167	153-175	5 8	3 5
5	10	137-147	141-152	4 5	3 3	143-158	149-161	6 3	4 2	152-172	156-179	4 7	3 4
5	11	141-151	144-155	3 4	2 3	147-163	152-165	5 2	3 1	157-177	159-183	2 6	1 3
6	0	145-155	147-159	2 4	1 3	151-168	155-169	4 1	3 1	161-182	163-187	2 5	1 3
6	1	149-160	150-163	1 3	1 2	155-173	159-173	4 0	3 0	166-187	167-192	1 5	1 3
6	2	153-164	153-167	0 3	0 2	160-178	162-177	2 −1	1 −1	171-192	171-197	0 5	0 3
6	3	157-168	157-171	0 3	0 2	165-183	166-182	1 −1	1 −1	175-197	176-202	1 5	1 3

WOMEN

Height (Without Shoes)		SMALL FRAME				MEDIUM FRAME				LARGE FRAME			
		1959	1983	Change Since 1959	Percent Change	1959	1983	Change Since 1959	Percent Change	1959	1983	Change Since 1959	Percent Change
Feet	Inches	Weight in Pounds (Without Clothing)											
4	9	90- 97	99-108	9 11	10 11	94-106	106-118	12 12	13 11	102-118	115-128	13 10	13 8
4	10	92-100	100-110	8 10	9 10	97-109	108-120	11 11	11 10	105-121	117-131	12 10	11 8
4	11	95-103	101-112	6 9	6 9	100-112	110-123	10 11	10 10	108-124	119-134	11 10	10 8
5	0	98-106	103-115	5 9	5 8	103-115	112-126	9 11	9 10	111-127	122-137	11 10	10 8
5	1	101-109	105-118	4 9	4 8	106-118	115-129	9 11	8 9	114-130	125-140	11 10	10 8
5	2	104-112	108-121	4 9	4 8	109-122	118-132	9 10	8 8	117-134	128-144	11 10	9 7
5	3	107-115	111-124	4 9	4 8	112-126	121-135	9 9	8 7	121-138	131-148	10 10	8 7
5	4	110-119	114-127	4 8	4 7	116-131	124-138	8 7	7 5	125-142	134-152	9 10	7 7
5	5	114-123	117-130	3 7	3 6	120-135	127-141	7 6	6 4	129-146	137-156	8 10	6 7
5	6	118-127	120-133	2 6	2 5	124-139	130-144	6 5	5 4	133-150	140-160	7 10	5 7
5	7	122-131	123-136	1 5	1 4	128-143	133-147	5 4	4 3	137-154	143-164	6 10	4 6
5	8	126-136	126-139	0 3	0 2	132-147	136-150	4 3	3 2	141-159	146-167	5 8	4 5
5	9	130-140	129-142	−1 2	−1 1	136-151	139-153	3 2	2 1	145-164	149-170	4 6	3 4
5	10	134-144	132-145	−2 1	−1 1	140-155	142-156	2 1	1 1	149-169	152-173	3 4	2 2

Note: Prepared by Metropolitan Life Insurance Company.

Source of basic data: *Build Study, 1979*, and *Build and Blood Pressure Study, 1959*, Society of Actuaries and Association of Life Insurance Medical Directors of America.

TABLE 5

CHANGES IN AVERAGE WEIGHTS FOR MEN AND WOMEN BETWEEN 1959 AND 1979

Weight in Pounds (Without Clothing) According to Height and Age

Height (Without Shoes)		Ages 20-24		Ages 25-29		Ages 30-39		Ages 40-49		Ages 50-59		Ages 60-69	
Feet	Inches	Average Weight 1979	Change Since 1959	Average Weight 1979	Change Since 1959	Average Weight 1979	Change Since 1959	Average Weight 1979	Change Since 1959	Average Weight 1979	Change Since 1959	Average Weight 1979	Change Since 1959
						MEN							
5	1	125	4	129	2	133	3	135	2	136	1	135	3
5	2	131	6	135	4	138	4	139	2	140	2	139	4
5	3	134	5	138	4	142	4	144	3	145	3	144	5
5	4	138	6	142	5	146	4	149	4	150	4	148	5
5	5	143	8	147	6	151	5	153	4	154	4	153	6
5	6	148	10	151	7	155	5	158	4	159	4	158	6
5	7	152	10	156	8	160	6	162	4	163	4	162	6
5	8	158	12	161	9	165	7	167	5	168	5	167	6
5	9	162	12	166	10	169	6	171	4	172	4	171	5
5	10	166	12	170	10	174	7	176	5	177	4	176	5
5	11	171	12	176	11	179	7	181	5	182	4	181	5
6	0	177	14	181	11	185	9	187	7	188	6	186	5
6	1	182	15	186	11	190	9	192	7	193	6	191	5
6	2	188	17	192	13	196	10	198	8	199	7	195	4
6	3	193	19	197	14	201	9	203	7	204	6	202	5
						WOMEN							
4	8	98	0	103	0	107	−4	111	−7	115	−6	117	−6
4	9	102	1	107	1	110	−3	115	−5	118	−5	120	−5
4	10	107	3	109	0	112	−4	118	−5	122	−4	124	−3
4	11	109	1	111	−1	115	−4	120	−6	124	−5	127	−3
5	0	113	2	116	1	118	−4	124	−5	128	−4	130	−3
5	1	117	3	118	0	121	−4	126	−6	130	−6	133	−4
5	2	121	4	122	1	125	−3	130	−6	134	−6	137	−4
5	3	124	3	125	0	128	−3	133	−6	138	−6	140	−5
5	4	127	2	129	0	131	−4	136	−7	141	−7	144	−5
5	5	130	2	131	−1	134	−4	140	−7	144	−8	147	−6
5	6	134	2	135	−1	138	−4	144	−7	149	−7	152	−5
5	7	138	2	139	−1	142	−4	147	−8	153	−7	155	−5
5	8	143	3	145	1	147	−3	152	−8	156	−9	158	*
5	9	146	1	147	−2	150	−5	155	−10	159	−11	160	*
5	10	152	2	153	−1	156	−4	159	−11	163	−13	164	*

*Not calculated because of insufficient data in 1959.

Note: Prepared by Metropolitan Life Insurance Company.

Source of basic data: *Build Study, 1979*, and *Build and Blood Pressure Study, 1959*, Society of Actuaries and Association of Life Insurance Medical Directors of America.

cause these tables were developed from data using different assumptions as to heel height and clothing weight, the comparison was made possible by adjusting both versions of the tables to a nude basis—weight without clothes and height without shoes. In 1959 it was assumed that male indoor clothing (including shoes) weighed seven pounds; an estimate of five pounds was used in 1983. The corresponding figures for females were four pounds in 1959 and three pounds in 1983. A one-inch heel height was assumed for both men and women in 1983, compared with a one-inch heel for men and a two-inch heel for women in 1959.

The new tables show increases in weights based on lowest mortality. However, the increases in weight were not uniformly distributed throughout the tables. Weight increases for tall men and women were not so large as those for short persons or for those of medium height. For short men, the average increase in weight based on lowest mortality was 13 pounds, compared with seven pounds for men of medium height, and only two pounds for tall men. On a percentage basis, the increase was 10 percent for short men, 5 percent for men of medium height, and 1 percent for tall men.

Among women, the pattern was much the same. For short women, the average increase in weight based on lowest mortality was 10 pounds, compared with eight pounds for women of medium height, and three pounds for tall women. On a percentage basis, the increase was 9 percent for short women, 6 percent for women of medium height, and 2 percent for tall women.

Table 5 presents the average weights by height from the *Build Study, 1979,* for men and women aged 20 to 64, and shows how these weights differ from the average weights in the *Build and Blood Pressure Study, 1959.* The figures have been adjusted to nude weight and height without shoes to compensate for differences in the basic data. In the two decades between the studies, average weights for all men and young women have increased but there has been a decline in average weights among older women.

Since the 1959 study, changes in average weights and increases in weights associated with the lowest mortality have resulted in a narrowing of the gap between them. In the 1983 tables, weights based on lowest mortality range from 10 to 20 pounds below the average weights for men; in 1959 the difference was 15 to 20 pounds. For women, the new Metropolitan weights are five or fewer pounds below average weights, while the difference ranged from 15 to 20 pounds in 1959. Even though the gap has narrowed, particularly for women, it must be reiterated that it is still considered best to be slender and to keep your weight below average weight.

Because the earlier Metropolitan height and weight tables had been called "ideal" or "desirable," various misinterpretations of their meaning and purpose occurred. The new tables, like the earlier tables, simply indicate the weights at which people should have the greatest longevity. These weights are not used for underwriting or in the computation of premiums. They are not the weights that minimize illness or the incidence of disease. Neither are they weights that optimize job performance, nor the weights for best appearance. Because the words "ideal" and "desirable" mean different things to different people and have created confusion, these terms will no longer be used in referring to Metropolitan's height and weight tables.

No one standard of weights can always satisfy the needs of the public, the medical profession, public health workers, or nutritionists, nor can such a standard necessarily be appropriate for those suffering from various impairments or diseases. The new height and weight tables are a health education tool—a guideline.

[1] *Build Study, 1979.* Chicago, Society of Actuaries and Association of Life Insurance Medical Directors of America, 1980.

[2] *Build and Blood Pressure Study, 1959.* Chicago, Society of Actuaries and Association of Life Insurance Medical Directors of America, 1980.

[3] Data tape, HANES I—Anthropometry, goniometry, skeletal age, bone density, and cortical thickness, ages 1-74. National Health and Nutrition Examination Survey, 1971-75, National Center for Health Statistics.

[4] Ideal Weights for Women. *Statistical Bulletin* 23:6-8, October 1942.

[5] Ideal Weights for Men. *Statistical Bulletin* 24:6-8, June 1943.

[6] New Weight Standards for Men and Women. *Statistical Bulletin* 40:1-4, November-December 1959.

Accident Death Toll in 1982

Accidents caused an estimated 95,500 deaths in the United States in 1982, about 3,500 fewer than in the previous year. The provisional mortality rate from accidents in 1982 was 41.3 per 100,000 population, about 4.5 percent lower than the fatality rate of 43.2 in 1981. This estimated death rate for 1982 is the lowest on record.

The decline in mortality from accidents in 1982 was due largely to the dramatic 10 percent drop in the death toll from motor vehicle accidents during the year. Such fatalities fell by about 5,000—to an estimated 46,500—registering the lowest number of deaths from motor vehicle accidents since 1975, the first year that mandatory lower speed limits were effectively enforced throughout the nation. Traffic safety experts attribute part of the current decline in deaths from motor vehicle accidents to the rise in the legal minimum drinking age in several states, as well as to intensified police efforts to combat driving by those who are alcohol impaired. Preliminary data indicate that the death rate per 100 million miles traveled reached a record low of 3.0 in 1982.

Public accidents, other than those involving motor vehicles, accounted for 20,000 deaths in 1982—about 1,000 more than in the previous year. Job-related fatalities decreased by about 300 to a low of 11,800; approximately 3,600 of these deaths are included in the estimated 46,500 motor vehicle fatalities in 1982. Deaths from injuries in and about the home remained at about the same level as the 21,000 deaths estimated for 1981.

According to records maintained by the Metropolitan Life Insurance Company, about 900 persons in the United States died in catastrophes (accidents taking five or more lives) in 1982. The death toll from such accidents was about a quarter higher than that in 1981. There was a significant increase in deaths from civil aviation accidents and cataclysms (tornadoes, floods, mud slides, etc.), as well as from military aviation and motor vehicle catastrophes. On the other hand, catastrophic accidents in mines and quarries, in water transportation, and from fires accounted for fewer deaths in 1982 than in the previous year. Accidents in civil aviation caused more than one-third of all catastrophic deaths in 1982 and cataclysms accounted for about one-fifth. Fires and motor vehicle accidents were each responsible for one-eighth of the catastrophic deaths, while one-tenth were attributed to military aviation accidents.

During 1982 there were five major catastrophes, each of which caused 25 or more fatalities; in the aggregate they resulted in 325 deaths. The worst disaster of the year occurred on July 9 in Kenner, La., when a scheduled airliner crashed in a suburban residential area minutes after takeoff from New Orleans International Airport during a severe thunderstorm. The plane plowed through several houses, setting them and others ablaze. All 146 persons on board the plane and eight others on the ground were killed, recording the second highest death toll in the nation's aviation history. The National Transportation Safety Board's investigation of the disaster has focused on the theory that the jet ran into wind shear (sudden vertical and horizontal shifts in wind direction and velocity) caused by thunderstorms and other frontal systems that can rob a jetliner of needed lift on landing approach or takeoff.

MAJOR CATASTROPHES IN THE UNITED STATES, 1978-82

Accidents Taking 25 or More Lives

Date	Place	Type of Accident	Number of Lives Lost
		1982	
July 9	Kenner, La.	Crash of scheduled plane	154
January 13	Washington, D.C.	Crash of scheduled plane	78
January 3-5	Northern California	Floods and mud slides	36
April 2	Arkansas, Mississippi, Missouri, Northern Texas	Tornadoes	30
March 19	Near Chicago, Ill.	Explosion and crash of military plane	27
		1981	
July 17	Kansas City, Mo.	Collapse of two aerial walkways in hotel	114
October 26	Off Hillsboro Beach, Fla.	Sinking of boat	33
January 9	Keansburg, N.J.	Fire in rest home for aged	31
		1980	
November 21	Las Vegas, Nev.	Fire in hotel	85
May 18	Mount St. Helens, Wash.	Volcanic eruption	60
May 9	Tampa Bay, Fla.	Collision of ship with bridge during rainstorm	35
February 13-21	Southern California	Rain, floods, and subsequent mud slides	30
		1979	
May 25	O'Hare Airport, Chicago, Ill.	Crash of scheduled plane	273
April 10	Wichita Falls, Texas	Tornado	42
November 1	Gulf of Mexico Off Galveston, Texas	Collision of tanker and freighter	32
April 2	Farmington, Mo.	Fire in retirement home	25
		1978	
September 25	San Diego, Calif.	Collision of scheduled and private planes	144
January 25-27	Midwest	Blizzard	80
April 27	Willow Island, W.Va.	Collapse of scaffolding inside cooling tower of power plant under construction	51
February 5-7	Northeast	Severe snowstorm	50
August 2-3	Texas	Floods	27

Note: Figures for natural disasters are approximate.

Another civil aviation disaster occurred on January 13 in Washington, D.C. A jetliner taking off from National Airport during a snowstorm crashed into a bridge, striking several vehicles on the bridge, and plunged into the icy Potomac River; 74 of the 79 persons aboard the plane and four persons on the bridge were killed. Federal safety experts believe that ice buildup on the jetliner contributed to the crash; snow or ice can alter the shape of the wing edges, changing their aerodynamics and affecting the ability of lift devices to help the aircraft climb. Before takeoff the plane had spent 50 minutes on the ground following its last de-icing. However, the chief causes cited by the National Transportation Safety Board's report were the crew's failure to turn on the engine anti-icing systems, the decision to take off with ice on the airfoils, and the captain's failure to abort the takeoff when the co-pilot called his attention to abnormal readings on engine instruments.

There were two natural disasters in 1982. On January 3-5, one of the most destructive rainstorms of modern times caused mud slides and raging floods in northern California, and claimed approximately 36 lives. On April 2, 56 tornadoes swept through Arkansas, Mississippi, Missouri, and northern Texas, resulting in about 30 deaths.

The fifth major disaster in 1982 occurred on March 19 in northern Illinois. A military tanker jet exploded during a thunderstorm and plunged from a height of 13,000 feet into a snowy field, scattering wreckage over four miles and killing all 27 persons aboard.

Life Expectancy in the United States

The expectation of life at birth for the total resident population of the United States reached an all-time high of 74.5 years in 1982, according to preliminary life tables prepared by the Metropolitan Life Insurance Company. Both males and females shared in this record. Life expectancy for newborn males rose to 70.7 years while the expectation of life at birth for newborn females increased to 78.2 years.

Between 1981 and 1982, the average life expectancy of the total population increased by 0.4 years, with a gain of 0.4 years among males and 0.3 years among females. (See Table 1.) Longevity increments in the previous year had been 0.3 years for the total population, 0.3 years for males, and 0.2 years for females. Between 1979 and 1980, however, average life expectancy had remained the same for males but declined by 0.1 years for the total population and for females. This was the first time since 1968 that a decline in life expectancy had occurred. With the exception of the expected lifetime for newborn males, the average life expectancy in 1980 for each age shown in the table was lower than that in 1979. The decline in longevity in 1980 can be attributed to the influenza epidemics that occurred in the early and late months of the year. On the other hand, the gains in life expectancy in 1981 and 1982 reflect the absence of severe influenza outbreaks during those years, as well as the continued decline in mortality from the major cardiovascular diseases and from accidents. Another significant factor in the recent

TABLE 1—EXPECTATION OF LIFE (IN YEARS)

United States, 1979-1982

	National Center for Health Statistics			Metropolitan Life Insurance Company
Age	1979	1980*	1981*	1982*
Total Population				
0	73.9	73.8	74.1	74.5
1	73.9	73.7	74.0	74.3
15	60.3	60.1	60.4	60.7
25	50.9	50.8	50.9	51.2
35	41.5	41.4	41.6	41.8
45	32.4	32.2	32.4	32.6
55	24.0	23.8	24.0	24.2
65	16.7	16.5	16.7	16.8
75	10.7	10.5	10.7	10.8
Male				
0	70.0	70.0	70.3	70.7
1	70.1	69.9	70.2	70.6
15	56.5	56.4	56.7	57.0
25	47.4	47.3	47.5	47.8
35	38.2	38.1	38.3	38.6
45	29.2	29.1	29.3	29.5
55	21.1	21.0	21.2	21.4
65	14.3	14.2	14.3	14.5
75	9.1	8.8	9.0	9.1
Female				
0	77.8	77.7	77.9	78.2
1	77.7	77.5	77.7	77.9
15	64.1	63.9	64.0	64.2
25	54.4	54.2	54.3	54.6
35	44.8	44.6	44.7	44.9
45	35.4	35.2	35.3	35.5
55	26.7	26.4	26.6	26.7
65	18.7	18.5	18.7	18.8
75	11.9	11.6	11.9	11.9

*Provisional.

TABLE 2—EXPECTATION OF LIFE AND MORTALITY AT SINGLE YEARS OF AGE

By Race and Sex, United States, 1979

Age	Expectation of Life in Years					Mortality Rate per 1,000				
	Total Persons	White		All Other		Total Persons	White		All Other	
		Male	Female	Male	Female		Male	Female	Male	Female
0	73.9	70.8	78.4	65.4	74.1	13.2	12.9	10.0	21.7	18.2
1	73.9	70.7	78.2	65.9	74.5	.9	.9	.7	1.3	1.1
2	73.0	69.7	77.3	65.0	73.5	.7	.7	.5	1.1	.9
3	72.0	68.8	76.3	64.0	72.6	.5	.5	.4	.9	.7
4	71.0	67.8	75.3	63.1	71.7	.4	.4	.3	.8	.6
5	70.1	66.9	74.4	62.1	70.7	.4	.4	.3	.6	.5
6	69.1	65.9	73.4	61.2	69.7	.3	.4	.3	.6	.4
7	68.1	64.9	72.4	60.2	68.8	.3	.4	.2	.5	.3
8	67.2	63.9	71.4	59.2	67.8	.3	.3	.2	.4	.3
9	66.2	62.9	70.4	58.3	66.8	.2	.3	.2	.4	.2
10	65.2	62.0	69.4	57.3	65.8	.2	.2	.2	.3	.2
11	64.2	61.0	68.5	56.3	64.8	.2	.2	.2	.3	.2
12	63.2	60.0	67.5	55.3	63.8	.3	.3	.2	.4	.2
13	62.2	59.0	66.5	54.3	62.9	.4	.5	.3	.5	.3
14	61.3	58.0	65.5	53.4	61.9	.5	.8	.3	.7	.3
15	60.3	57.1	64.5	52.4	60.9	.7	1.0	.4	.9	.4
16	59.3	56.1	63.6	51.5	59.9	.9	1.3	.5	1.1	.5
17	58.4	55.2	62.6	50.5	58.9	1.0	1.5	.6	1.3	.5
18	57.4	54.3	61.6	49.6	58.0	1.1	1.7	.6	1.6	.6
19	56.5	53.4	60.7	48.6	57.0	1.2	1.8	.6	1.9	.7
20	55.6	52.5	59.7	47.7	56.1	1.2	1.8	.6	2.1	.8
21	54.6	51.6	58.7	46.8	55.1	1.3	1.9	.6	2.4	.8
22	53.7	50.7	57.8	46.0	54.1	1.3	1.9	.6	2.7	.9
23	52.8	49.8	56.8	45.1	53.2	1.3	1.9	.6	2.9	1.0
24	51.9	48.9	55.8	44.2	52.2	1.3	1.9	.6	3.0	1.0
25	50.9	48.0	54.9	43.3	51.3	1.3	1.8	.6	3.2	1.1
26	50.0	47.0	53.9	42.5	50.3	1.3	1.7	.6	3.3	1.1
27	49.1	46.1	52.9	41.6	49.4	1.3	1.7	.6	3.5	1.2
28	48.1	45.2	51.9	40.8	48.5	1.3	1.6	.6	3.5	1.2
29	47.2	44.3	51.0	39.9	47.5	1.3	1.6	.6	3.6	1.3
30	46.2	43.3	50.0	39.0	46.6	1.3	1.6	.6	3.7	1.3
31	45.3	42.4	49.0	38.2	45.6	1.3	1.6	.7	3.8	1.4
32	44.4	41.5	48.1	37.3	44.7	1.3	1.6	.7	3.9	1.5
33	43.4	40.5	47.1	36.5	43.8	1.4	1.6	.7	4.1	1.7
34	42.5	39.6	46.1	35.6	42.8	1.5	1.7	.8	4.3	1.8
35	41.5	38.7	45.2	34.8	41.9	1.6	1.8	.9	4.6	2.0
36	40.6	37.7	44.2	33.9	41.0	1.7	1.9	1.0	4.9	2.2
37	39.7	36.8	43.3	33.1	40.1	1.8	2.0	1.1	5.2	2.4
38	38.7	35.9	42.3	32.3	39.2	2.0	2.2	1.2	5.5	2.6
39	37.8	35.0	41.4	31.4	38.3	2.1	2.4	1.3	5.9	2.8
40	36.9	34.0	40.4	30.6	37.4	2.3	2.6	1.4	6.3	3.0
41	36.0	33.1	39.5	29.8	36.5	2.5	2.8	1.6	6.8	3.2
42	35.1	32.2	38.5	29.0	35.6	2.8	3.1	1.8	7.3	3.4
43	34.2	31.3	37.6	28.2	34.7	3.1	3.5	1.9	7.8	3.8
44	33.3	30.4	36.7	27.4	33.9	3.4	3.9	2.1	8.4	4.1

TABLE 2—EXPECTATION OF LIFE AND MORTALITY AT SINGLE YEARS OF AGE

By Race and Sex, United States, 1979

Age	Expectation of Life in Years					Mortality Rate per 1,000				
	Total Persons	White		All Other		Total Persons	White		All Other	
		Male	Female	Male	Female		Male	Female	Male	Female
45	32.4	29.5	35.7	26.7	33.0	3.7	4.3	2.3	8.9	4.5
46	31.5	28.7	34.8	25.9	32.2	4.1	4.8	2.5	9.6	4.9
47	30.6	27.8	33.9	25.2	31.3	4.5	5.3	2.8	10.4	5.4
48	29.8	27.0	33.0	24.4	30.5	4.9	5.9	3.1	11.3	5.9
49	28.9	26.1	32.1	23.7	29.7	5.5	6.5	3.4	12.5	6.5
50	28.1	25.3	31.2	23.0	28.9	6.0	7.2	3.8	13.7	7.1
51	27.2	24.5	30.3	22.3	28.1	6.6	8.0	4.2	15.0	7.8
52	26.4	23.7	29.5	21.6	27.3	7.2	8.8	4.6	16.2	8.4
53	25.6	22.9	28.6	21.0	26.5	7.8	9.6	5.0	17.3	8.9
54	24.8	22.1	27.7	20.3	25.7	8.4	10.4	5.3	18.3	9.4
55	24.0	21.3	26.9	19.7	25.0	9.0	11.2	5.7	19.2	9.8
56	23.2	20.5	26.0	19.1	24.2	9.7	12.1	6.2	20.3	10.4
57	22.4	19.8	25.2	18.5	23.5	10.5	13.3	6.7	21.6	11.1
58	21.7	19.0	24.4	17.9	22.7	11.5	14.7	7.4	23.0	12.1
59	20.9	18.3	23.5	17.3	22.0	12.6	16.3	8.1	24.7	13.2
60	20.2	17.6	22.7	16.7	21.3	13.9	18.0	8.9	26.5	14.6
61	19.5	16.9	21.9	16.1	20.6	15.2	19.9	9.8	28.4	15.9
62	18.7	16.3	21.1	15.6	19.9	16.5	21.7	10.7	30.2	17.1
63	18.1	15.6	20.4	15.1	19.3	17.8	23.6	11.5	31.8	18.1
64	17.4	15.0	19.6	14.6	18.6	19.0	25.4	12.3	33.4	19.0
65	16.7	14.4	18.8	14.0	17.9	20.3	27.3	13.2	34.9	19.7
66	16.0	13.7	18.1	13.5	17.3	21.7	29.4	14.2	36.5	20.7
67	15.4	13.1	17.3	13.0	16.7	23.4	31.8	15.4	38.6	22.0
68	14.7	12.6	16.6	12.5	16.0	25.5	34.7	16.9	41.1	24.0
69	14.1	12.0	15.9	12.0	15.4	27.9	38.0	18.7	44.1	26.4
70	13.5	11.5	15.2	11.6	14.8	30.5	41.7	20.6	47.5	29.2
71	12.9	10.9	14.5	11.1	14.2	33.2	45.5	22.8	50.9	32.0
72	12.3	10.4	13.8	10.7	13.7	36.1	49.4	25.0	54.3	34.6
73	11.8	9.9	13.1	10.3	13.2	38.8	53.2	27.4	57.2	37.1
74	11.2	9.5	12.5	9.9	12.7	41.7	56.9	30.0	59.8	39.3
75	10.7	9.0	11.9	9.5	12.2	44.7	60.9	32.8	62.3	41.5
76	10.2	8.6	11.2	9.1	11.7	48.1	65.1	36.0	65.0	43.9
77	9.7	8.1	10.7	8.7	11.2	51.9	70.0	39.7	68.3	46.6
78	9.2	7.7	10.1	8.3	10.7	56.2	75.5	43.8	72.2	49.7
79	8.7	7.3	9.5	7.9	10.2	61.2	81.9	48.6	76.8	53.2
80	8.2	6.9	9.0	7.5	9.8	67.0	89.0	54.1	82.1	57.0
81	7.8	6.6	8.5	7.1	9.4	73.5	97.0	60.5	88.0	61.0
82	7.4	6.2	8.0	6.8	8.9	80.8	105.7	67.9	94.3	65.0
83	7.0	5.9	7.5	6.5	8.5	89.2	115.2	76.7	100.8	68.8
84	6.6	5.6	7.1	6.1	8.1	98.6	125.1	87.1	106.9	72.0
85	6.3	5.3	6.8	5.8	7.7					

Source: National Center for Health Statistics.

increase in longevity has been the continuing improvement in infant mortality—the death rate fell from 12.5 per 1,000 live births in 1980 to 11.7 per 1,000 in 1981 and to a record low of 11.2 per 1,000 in 1982.

According to Table 1, men aged 25 in 1982 could anticipate an additional 47.8 years of life, compared with 47.5 years in 1981 and 47.3 years in 1980. At age 45 the average remaining lifetime was 29.5 years in 1982, 29.3 years in 1981, and 29.1 years in 1980. Men aged 65 could look forward to another 14.5 years of life—0.2 years more than that expected in 1981.

In 1982 women aged 25 had an average future lifetime of 54.6 years, 0.3 years greater than could be expected in 1981 and 0.4 years more than in 1980. At age 45, 35.5 additional years could be anticipated, compared with 35.3 years in 1981 and 35.2 years in 1980. The average expectation of life for women 65 years old was 18.8 years, fractionally greater than the figure for 1981.

There is a substantial sex differential in longevity for the population as a whole. A female born in 1982 can expect to outlive her male counterpart by 7.5 years. This differential has fluctuated between 7.5 and 7.8 years since 1968.

To provide more specific information on longevity in the United States, Table 2 presents data on life expectancy and mortality for whites and nonwhites at single years of age in 1979 (the latest year for which such detailed data by age, race, and sex are available). In 1979 the expectation of life at birth was considerably greater for whites than for nonwhites. White males could expect to live on the average 5.4 years longer than nonwhite males, and white females about 4.3 years more than nonwhite females. Females continued to have a longevity advantage. A newborn white female could expect to outlive a newborn white male by 7.6 years; among nonwhites the sex differential was 8.7 years.

In recent years longevity has improved more rapidly for the nonwhite population. Between 1969-71 and 1979, life expectancy at birth for the nonwhite population rose by 4.8 years. For the white population, the increase in longevity during the period was 3.0 years. In 1979 a newborn white female had a life expectancy of 78.4 years, a gain of 2.9 years since 1969-71, while a nonwhite infant girl could expect to survive to 74.1 years, an increase of 5.1 years during the same period. In the male population the average length of life at birth was 70.8 years for whites and 65.4 years for nonwhites—representing gains of 2.9 and 4.4 years, respectively.

While increases in life expectancy occurred at every age, the gains were greatest at the younger ages. Moreover, improvement was greater for nonwhites than for whites, and the increases were larger for females than for males. In 1979 white females had a life expectancy of 54.9 years at age 25, 35.7 years at age 45, 18.8 years at age 65, and 11.9 years at age 75. These figures reflected increases in longevity since 1969-71 of 2.5 years at age 25, 2.2 years at age 45, 1.9 years at age 65, and 1.7 years at age 75. The pattern was the same for white males, with increases of 2.3 years at age 25 and of 1.4 years at age 65. Among nonwhite females there were increments of 4.1 years at age 25 and 1.9 years at age 65. Among nonwhite males the expectation of life at age 25 increased by 3.0 years and at age 65 by 1.1 years. Longevity was more favorable among white men at the earlier ages, but after age 69 nonwhite men had the advantage. The average length of life was greater for white women than for nonwhite women until age 72; thereafter, the reverse was true.

Although larger gains in longevity were generally recorded for the nonwhite population, their mortality rates (upon which expectation of life figures are based) continue to remain relatively higher than the mortality rates among whites. Death rates were less than 1 per 1,000 population at ages 1 to 35 among white females and at ages 2 to 22 among nonwhite females. Mortality at this low level prevailed only at ages 1 to 14 among white males and at ages 3 to 15 among nonwhite males. Death rates remained below 5 per 1,000 until age 46 for white males and age 52 for white females; among nonwhites, death rates below 5 per 1,000 held until age 36 for males and age 46 for females.

Based on current mortality conditions, about seven out of every 10 white women can expect to celebrate their 75th birthday, while only about one in two white men can do so. Among nonwhites the chances of surviving to age 75 are about three in five for women and about one in three for men.

Disability Among Metropolitan Employees in 1980-81

The incidence of disability* among personnel of the Metropolitan Life Insurance Company occurred at an average annual rate of 153 per 1,000 in 1980-81. About two out of every 13 employees in the home office, head offices, and the field became disabled during this two-year period.

As shown in the table on page 18, the highest disability rates in 1980-81 were recorded among women—190 per 1,000 for office personnel and 173 per 1,000 for sales personnel. Disability rates among men were considerably lower—104 per 1,000 for office personnel and 122 per 1,000 for sales personnel.

Older employees were disabled more frequently than younger employees, the disability rates generally rising with advance in age. Among male office personnel, the annual incidence of disability lasting longer than a week was 191 per 1,000 at ages 55-64, more than double the rate of 81 per 1,000 recorded at ages 17-24. Among male sales employees, the disability rate at ages 55-64 was 205 per 1,000, nearly three times that at ages under 25.

Among female office personnel, the incidence of disability increased with advance in age, although the difference in rates at the younger and older ages was not so large as that for males. New cases of disability among female office employees occurred at an average annual rate of 230 per 1,000 at ages 55-64, compared with 176 per 1,000 at ages 17-24. The experience among female sales employees, however, followed a much different pattern. For these women the highest incidence of disability was recorded at the younger ages; the rates rose from 179 per 1,000 at ages 17-24 to 186 at ages 25-44, dropped to 144 per 1,000 at ages 45-54, and then rose to 167 at ages 55-64.

In 1980-81 diseases of the respiratory system were the leading cause of disability among male office personnel at all ages combined; accidental injuries and diseases of the digestive system ranked next. These three causes were responsible for more than half of all disabilities lasting longer than a week among male office employees during the two-year period. Accidental injuries were the leading cause of disability at ages 17-24 and ages 45-54, while respiratory diseases ranked second in these age groups. At ages 25-44 and 55-64, however, respiratory diseases were the leading cause of disability. Diseases of the digestive system and of the circulatory system were also major causes of disability at ages 45 and over.

Among male sales personnel at ages 17-64, accidental injuries were the most frequent cause of disability, followed by diseases of the circulatory system, diseases of bones and other organs of movement, and digestive disorders. More than three-fifths of all disabilities among male sales employees were attributed to these four disease categories. Accidental injuries led in frequency at ages under 45; at the older ages circulatory diseases ranked first, followed by diseases of the digestive system. The increased frequency of disability from circulatory diseases with advancing age was particularly pronounced; the incidence of new cases rose from 7 per 1,000 at ages 25-44, to 26 per 1,000 at ages 45-54, and to 49 per 1,000 at ages 55-64.

Maternity and related conditior.s were the most frequent cause of disability among female person-

*Limited to cases of illness lasting longer than a week to a maximum of 26 weeks; if still disabled, employees receive further benefits under another part of the Company's Insurance and Retirement program.

INCIDENCE OF DISABILITY LASTING LONGER THAN A WEEK

Personnel of the Metropolitan Life Insurance Company,* 1980-81

Annual Incidence per 1,000

Cause of Disability	Male					Female				
	Ages 17-64	Ages 17-24	Ages 25-44	Ages 45-54	Ages 55-64	Ages 17-64	Ages 17-24	Ages 25-44	Ages 45-54	Ages 55-64
Office Personnel										
All Causes	103.8	81.1	74.1	180.0	191.3	189.8	176.2	178.7	204.1	229.8
Diseases of respiratory system	21.7	14.1	17.2	34.2	38.8	34.4	19.3	27.3	49.4	62.9
Diseases of digestive system	14.5	8.8	10.1	25.1	30.7	14.2	13.6	11.1	19.5	19.4
Diseases of circulatory system	9.8	‡	4.0	26.1	29.8	7.5	1.9	4.1	13.3	20.1
Diseases of heart	4.5	‡	‡	11.1	19.0	2.6	‡	.8	4.6	9.7
Diseases of genitourinary system	4.6	‡	2.8	‡	15.3	17.7	10.2	20.2	23.6	13.4
Maternity and related conditions	—	—	—	—	—	49.1	88.5	62.8	—	—
Diseases of bones and other organs of movement	10.9	‡	8.3	22.1	19.0	17.0	7.4	12.2	27.2	35.4
Neoplasms—total	2.8	‡	‡	‡	10.8	7.7	3.1	5.9	14.4	12.7
Benign	1.3	‡	‡	‡	‡	4.9	2.8	4.0	8.9	6.5
Psychoneuroses and psychoses	1.5	‡	‡	‡	‡	3.7	2.2	4.2	4.5	2.8
Accidental injuries	19.2	23.8	16.1	37.2	11.7	17.2	12.6	13.7	20.1	31.7
Sales Personnel†										
All Causes	122.1	72.3	87.1	138.6	205.1	172.8	178.8	185.6	144.3	166.6
Diseases of respiratory system	11.0	‡	9.6	12.3	14.6	20.2	14.9	18.5	16.5	38.7
Diseases of digestive system	17.1	6.8	10.6	22.1	30.2	14.6	15.8	15.4	12.6	14.2
Diseases of circulatory system	19.4	‡	6.5	25.8	48.8	7.7	‡	5.2	8.2	22.1
Diseases of heart	10.7	‡	2.9	13.5	29.7	2.8	‡	‡	‡	14.2
Diseases of genitourinary system	5.7	‡	3.5	5.1	13.3	19.7	9.6	21.2	23.8	15.0
Maternity and related conditions	—	—	—	—	—	33.2	64.9	49.1	—	—
Diseases of bones and other organs of movement	17.8	8.7	13.7	21.3	26.5	16.8	11.4	14.8	20.8	22.1
Neoplasms—total	3.1	‡	.8	4.8	7.2	9.4	‡	9.4	11.7	‡
Benign	1.7	‡	‡	3.0	3.9	6.1	‡	6.5	6.9	‡
Psychoneuroses and psychoses	5.5	‡	4.3	6.3	9.0	5.1	‡	6.4	6.1	‡
Accidental injuries	21.2	26.6	23.1	18.0	19.1	23.0	23.7	22.3	22.5	26.1

*Personnel in the Pacific Coast States and Canada are not included.
†Employees in the district offices and field (including clerical).
‡Fewer than 10 cases in this category; rate not computed.

nel. Ranking second were respiratory diseases among office employees and accidental injuries among sales employees. Among female office personnel, maternity and related conditions led in frequency at ages under 45, while respiratory diseases led at the older ages. About one of every 11 women aged 17-24 and one of every 16 women aged 25-44 who worked in the home and head offices were disabled in 1980-81 because of pregnancy. Among female sales personnel, maternity and related conditions were the primary cause of disability at ages under 45, while diseases of the genitourinary system were the principal cause of disability at ages 45-54 and diseases of the respiratory system at ages 55-64. Accidental injuries ranked second for every age group.

During the two-year period, female employees experienced higher rates of disability from respiratory diseases, genitourinary diseases, and neoplasms than did men. Male employees, on the other hand, were disabled most frequently by circulatory diseases (particularly diseases of the heart) and digestive disorders. Both male and female office personnel recorded appreciably higher rates of disability from respiratory diseases than did sales personnel.

The chart on the back cover shows the incidence of disability by age for men and women in sales and office work, and indicates the effect of maternity and related conditions on the disability rates among women.

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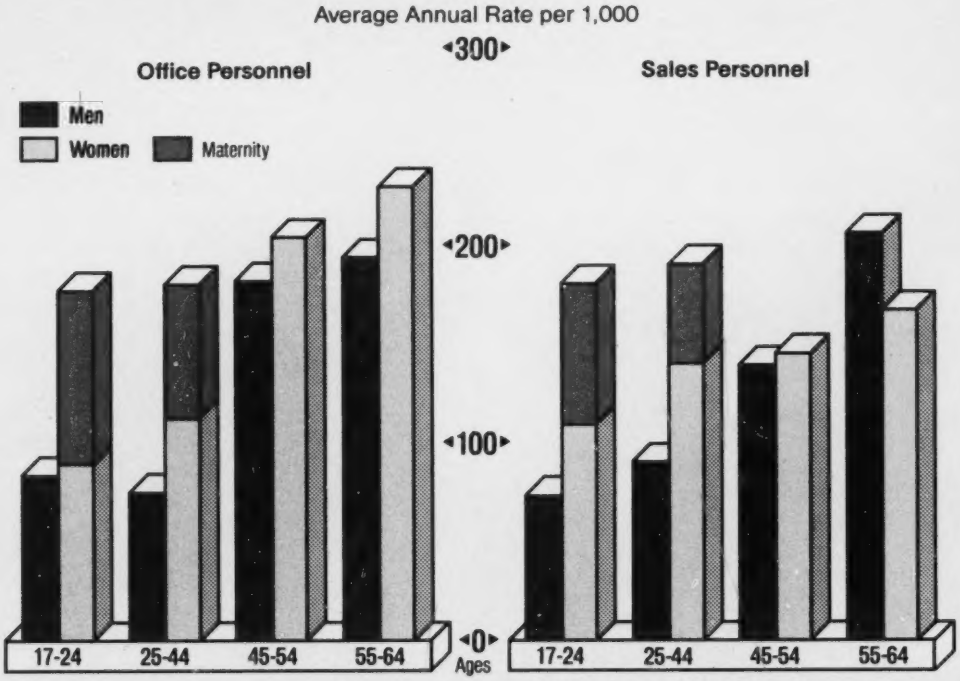
Incidence of Disability,* 1980-81

Personnel of Metropolitan Life Insurance Company



*Disability lasting longer than a week to a maximum of 26 weeks. Personnel in Pacific Coast States and Canada are not included.

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